SOLID TUMORS OF THE MESENTERY WITH REPORT OF A CASE AND A REVIEW OF THE LITERATURE.

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ALTHOUGH within recent years a good many cases of solid tumors of the mesentery have been reported the condition is still sufficiently rare to attract the attention of medical men.

Mesenteric tumors were described as early as 1803 by Portal, and classified by him as scirrhous, steatomatous, stony, cancerous and hydatid. He describes the diagnostic features clinically and points out the difficulty of differentiating between mesenteric and omental tumors. His work attracted very little attention, most probably because it was post-mortem. We hear nothing more of mesenteric tumors till 1880, when Tillaux reported a case of *cyst* of the mesentery successfully removed. In the same year Péan reported three such cases operated on by him, giving the diagnosis and treatment. In the next few years numerous cases of cysts were reported, but reports of solid tumors were exceedingly rare. So rare was this condition of solid tumors of the mesentery that Mr. Lockwood states that no such tumor had been exhibited to either the London Pathological or Medical Society prior to 1895. In 1897 Mr. Shield reported a case to the Medical and Chirurgical Society of London, at which time the subject was quite unfamiliar to that society. Douglas read a paper on this subject before the Southern Surgical and Gynecological Society in 1898, and no surgeon present had had any operative experience with these tumors.

Lipomata are said to be the most frequently found solid tumors, and these sometimes attain enormous size. Von Bergmann reports that Terillon removed one weighing 29 kg.

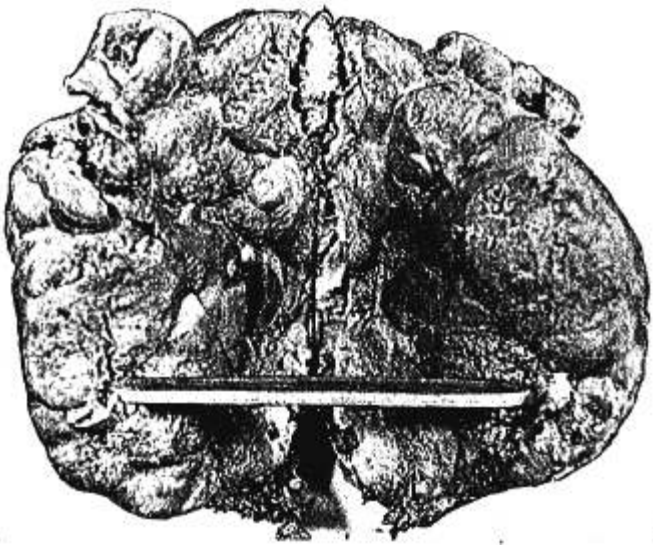

FIG. 1.—Gross appearance of tumor of mesentery.

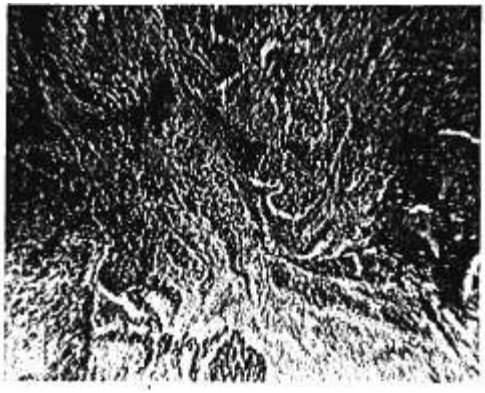

FIG. 2.—Sarcoma of mesentery. Photo-micrograph, magnified 50 diameters.

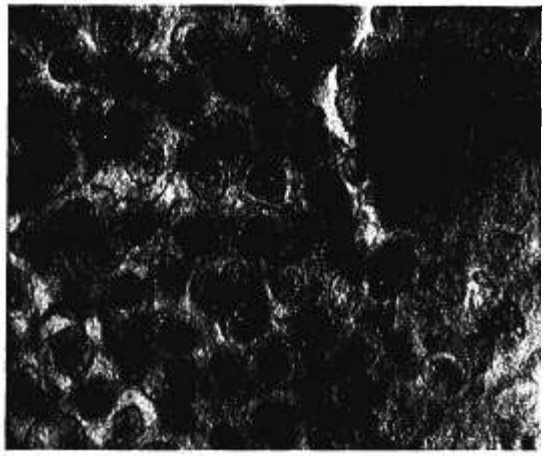

FIG. 3.—Sarcoma of mesentery. Photo-micrograph, magnified 425 diameters.

(64 lbs.). Van der Veer had one of 28 kg. and Péan another of 28 kg. Waldeyer describes a lipomatous myxoma with metastases in the lungs and other organs, weighing 61 lbs. Other primary tumors of the mesentery are fibroma, myxoma, enchondroma, teratoma, sarcoma, and adenoma; also mixed growths as fibro-lipoma, fibro-myxoma, fibro-myo-sarcoma, and lymphadenomata. Carcinoma is said never to be primary but always secondary, as a metastasis to a primary lesion elsewhere. This seems disproved by the case of primary carcinoma of the mesentery reported by Wanless in 1903 (see Case 22 of Table I).

The seat of these tumors is usually in the mesentery of the small intestine, but there are now several cases reported as seated in the mesocolon and sigmoid flexure. As new cases are reported the formerly restricted lines of origin and kinds of growth are widened till it now bids fair to include all mesentery as field of origin and nearly all kinds of tumors as the bounds of the new growths. The embryologic development of the mesentery makes this prediction likely if the embryonal theory of the origin of tumors amounts to anything.

TABLE I.—SOLID TUMORS OF THE MESENTERY.

Case.	Reporter.	Sex.	Age.	Growth.	Previous History.	Operation.	Attachment.	Resection.	Post-Operative History.
1	Dallmann. Inaug. Dissert. Halle, 1903.	M.	40	Numerous nodular fibroid masses.	Constipation, bowels moving only by enemeta. Headache and intestinal indigestion. Symptoms for 5 months.	Incision from xiphoid to symphysis. Large tumor removed with difficulty from mesentery alongside of vertebral column. Drain and tamponade.	Mesocolon and mesentery.	None.	Dismissed from hospital as cured on 26th day.
2	Gildermeister. Inaug. Dissert. Breslau, 1902.	F.	22	Fibroma with points of calcareous degeneration.	Obstipation, with vomiting, which became fecal three days prior to operation.	Median incision and small tumor removed from front of vertebral column between folds of mesentery.	By pedicle to mesentery.	None.	Recovery in 20 days.
3	"	F.	30	Spindle-celled sarcoma.	Pain and swelling in right side of abdomen. Other symptoms negative.	First Operation—Omentum adherent to tumor, which on separation opened an abscess from behind tumor. Drainage. Second Operation—Removal of entire growth.	To mesentery with many adhesions.	None.	First Operation—Pus drained for several days. Second Operation—Followed by complete recovery. Some months between the operations.
4	"	F.	8	Angio-sarcoma morphology of numerous semicircular dark red nodular masses.	Taken suddenly ill 8 days previous to operation with pain in abdomen. No vomiting or constipation.	Tumor removed with adherent bowel. No connection to reproductive organs.	Connected with mesentery but nowhere adherent except to bowel.	9 cm. of healthy bowel.	Death on 9th day from exhaustion.
5	"	F.	38	Fibroma.	Premature birth one year ago, since which she noticed a movable tumor in the abdomen. Pain, constipation and dyspnœa; 3 months pregnant at time of operation.	Tumor removed with adherent intestine. Anastomosis with Murphy button.	Mesentery and small intestine.	35 cm. of small intestine.	Recovery.
6	"	F.	33	Fibroma.	Swelling in abdomen noticed for 4 years. Severe pain and diarrhœa during last 3 mos.	Tumor very adherent, removed along with adherent intestine.	Between folds of mesentery.	23 cm. of gut.	Recovery.

7	Gildermeister. Inaug. Dissert. Breslau, 1902.	M.	41	Pure fibroma weighing 2½ kg.	Since 6 months has noticed hard mass size of child's head in abdomen. Freely movable.	Tumor removed from between folds of mesentery.	Mesentery.	2 cm.	Recovery.
8	"	F.	42	Myxofibroma, weighing 20 kg.	Large growth in abdomen, giving a circumference measure of 2 meters at umbilicus.	Tumor easily removed.	Origin between folds of mesentery.	None.	Recovery.
9	"	F.	32	Lipoma, weight 17½ kg.	Continuous abdominal pain for 2½ years. Frequent vomiting and obstipation. Large nodular mass in abdomen.	Whole abdomen filled with growth distinctly fluctuating in two places. Whole growth removed.	Between folds of mesentery.	8 cm.	Recovery.
10	"	M.	41	Sarcoma with numerous spaces of fatty degeneration. Weight 12½ kg.	Tumor in abdomen which in 5 months developed great size. Tumor filled whole abdominal cavity. Was hard, nodular and *painless*.	Removal of tumor.	Mesentery.	1.27 meters.	Death on 2d day from indefinite causes.
11	"	M.	....	Myxoma with metastases in sigmoid flex. and liver.	Was twice operated on in 3 years for mesenteric tumor. First operation removed a growth size of a man's head with resection of 48 cm. of gut. Was then well for 2 years. Had a recurrence, and a smaller tumor with the same amount of gut were again removed. Third recurrence at end of 9 months.	Third Operation — Tumor about the size of an apple was removed. Numerous adhesions to intestines.	Mesentery.	48 cm. removed at 1st and 2d operation each.	Death shortly after third operation.
12	"	F.	....	Lymphangioma.	Tumor with ascites.	Removal of tumor and adherent intestine.	Mesentery.	50 cm.	Recovery.
13	Hermes. Deutsch. Mod. Wochenschr. 1901. XXVII, 245.	F.	....	Large spindle-celled tumor, exact nature not stated.	Sick for 2 years with movable tumor in abdomen, beneath umbilicus Nodular and solid.	Attached omentum in being detached opened pus cavity. Tumor was removed with attached mesentery and bowel. Gut united by Murphy's button.	Mesentery.	Amount of gut not stated.	Recovery with no history of recurrence.
14	Lexer, E. Berlin. Klin. Wochenschr. 1900. XXXVII, 4.	M.	41	Fibroma.	Was well previous to April, 1899, when he was seized with colicky pains, increasing in severity. Tumor palpated, freely movable.	Tumor and involved bowel removed.	Mesentery of ileum by pedicle attached to vertebral column.	"Extensive."	Recovery in 20 days.

TABLE I.—SOLID TUMORS OF THE MESENTERY—*Continued.*

Case.	Reporter.	Sex.	Age.	Growth.	Previous History.	Operation.	Attachment.	Resection.	Post-Operative History.
15	From Jahresb. u. d. chr. Abt. d. Spital in Basel. 1901. 61.	F.	40	Sarcoma.	Complained for 4 months of pain in left hypochondrium, radiating from the navel; with gradual development of tumor in middle of abdomen.	"Exploratory." Tumor covered by mesentery with great masses of congested blood vessels. Small intestines pushed to right and colon passing over growth. In pelvis was a large quantity of liquid blood and coagula and fibrin. Operation could not be completed.	Mesentery with no connection with uterus.	None.	Death, with post-mortem diagnosis of "Sarcoma of mesentery with intra-abdominal hemorrhage."
16	Kownatzki Deutsch Militar. Zeitschrift. 1904, XXXIII, 254.	M.	24	Tubercular tumor the size of a child's head.	Pain in abdomen since April, 1903. Pain (May 5th, 1904) localized to left of navel. No bowel trouble. Fever continued from 13th to 15th, and remitted till 29th. Spleen not enlarged; leucocytes 6000. Anemia. Hard, painful, slightly movable tumor to left of navel.	Abdomen opened over tumor, but nothing more done. Three days later wound was reopened and on account of malignant appearance of growth and metastases in lungs wound was again closed.	Within the mesentery.	None.	Death 2 days after operation. Autopsy: Tuberculosis with metastasis in liver, spleen and lungs.
17	"	M.	21	Lympho - sarcoma. Tumor size of child's head.	Injured by falling from horse. Severe pain in pelvis when admitted to hospital. Next few days had temp. 38.6 C., fainting spells, nose bleed, meteorism, vomiting, severe abdominal pains, diarrhœa and distended abdomen. Later constipation.	Abdominal section for relief of severe symptoms. Tumor not removed. Adherent to intestines and second lumbar vertebra.	Mesentery with extensive intestinal attachments.	None.	Death soon after operation. Necropsy showed stomach and ileum adherent to "brain-like" growth surrounding pelvis of left kidney and ureters.
18	Latouche. Bull. et Min. Soc. de Chir. de Paris. 1900, XXVI, 889.	F.	53	Lipoma.	Woman of large physique and well nourished, presented all the symptoms of an ovarian tumor. Tumor nodular; no ascites.	Removal of tumor.	Between folds of mesentery.	None.	Recovery in 19 days.

19	Duranona (L.) Revista d. la Soc. Med. Buenos Ayres. 1901, IX, 499.	F.	42	Lobulated fibroma.	Began with abdominal pain 3 years ago, with enlargement. Menstruation regular. Abdomen measures 85 cm. in circumference.	Tumor removed. Adhesions to intestines and epiploon.	Mesoileum.	Of bowel involved.	Recovery.
20	Candido, G. Anals. di Med. Naval Roma. 1904. X, 303.	M.	26	Lymphosarcoma.	Of no interest.	.....	Mesentery.	None.	Death following operation.
21	Doran Brit. Med. J. 1904, II, 1075.	F.	34	Fibroma, weight 30 lbs., undergoing myxomatous degeneration.	Tumor simulated cyst of ovary. Pelvic organs and kidney healthy.	Removal of tumor through abdominal cavity.	Retro-peritoneal.	None.	Recovery.
22	Wanless, W. J. The Indian M. Gaz. 1903, XXXVIII, 377.	M.	14	Colloid carcinoma. The wall of tumor was very thin and friable, discharging large quantities of amber colored gelatinous fluid.	Swelling in abdomen first appeared 6 months ago size of a child's fist and rapidly increasing in size.	Removed tumor of doughy feel extending in direction of stomach beneath the liver and transverse colon.	Mesentery of transverse and ascending colon.	None.	Death on 3d day.
23	Moynihan. Med. Chronicle, Manchester. 1902, III, 367.	F.	60	Hæmatoma very vascular with fibroid capsule. Mass of tumor is composed of network of fibrin in different stages of organization.	Several weeks of increasing pain and discomfort in abdomen; about a month before operation felt a "lump" in abdomen. Pain became very severe, with vomiting and great depression. Tumor size of man's head and movable.	On opening peritoneum sero-sanguineous fluid escaped. A dense, hard, slightly nodular tumor was found which had twisted the gut to right angles with its long axis 1½ turns, forming a volvulus with tightly twisted pedicle.	Mesentery of small intestine.	73 inches of small intestine.	Death on 4th day from bronchitis.
24	Murphy, J. B. Clinic Review. 1901, XIV, 193.	F.	26	Fibroma.	Symptoms of ovarian tumor.	Tumor removed with its adherent gut.	Mesentery of ileum.	24 in.	Recovery.
25	Weir, Robt. F. Med. Record. 1900, LVII, 1137.	M.	40	Sarcoma.	Tumor in central portion of abdomen recognized about 2 months ago by patient. Indigestion prior to that time. Tumor movable but sensitive to touch.	Tumor lay in pelvis from which it was easily brought out, but a portion of small intestine to which it was attached broke and "leaked" into the abdomen, but was promptly controlled. Tumor was removed with a large amount of small intestine.	Mesentery and brim of pelvis.	8 ft. 2 in. of small intestine.	Death in 36 hours from peritonitis.

TABLE I.—SOLID TUMORS OF THE MESENTERY—*Continued.*

Case.	Reporter.	Sex.	Age.	Growth.	Previous History.	Operation.	Attachment.	Resection.	Post-Operative History.
26	Grandin, E. H. Am. J. Obst., 1902, XLVI, 225.	F.	....	"Hen's-egg shaped tumor, friable and contents of which somewhat resembled the decomposed yolk of an egg." Dermoid cyst (?) possibly a Colesteoma.	Patient was referred by family physician for removal of abdominal tumor.	Tumor was not readily found but was finally located in mesentery of jejunum, and removed.	Mesentery of jejunum.	None.	Nothing given.
27	Kengla, Louis A. Occidental Med. Times. 1902, XVI, 140.	M.	70	Pure fibroma, weighing 4½ lbs.	Enlargement of abdomen first noticed 3 years previously. No pain or discomfort, but obstipation, which led him to consult his physician.	Tumor and involved bowel removed and anastomosis by Murphy's button. Bowel was peculiarly wrapped around tumor.	Mesentery.	Involved intestine 87 inches.	Died on 3d day.

In reviewing the literature of the past five years there are found twenty-eight cases of solid tumor of the mesentery. (See Table I.) Twenty-seven of these cases I have tabulated for reference. The twenty-eighth case, that of Doleris' (*Gynecologic, Paris,* 1904, Vol. iv, 108) could not be obtained and consequently I am not sure it belongs to this group, so have been obliged to pass it by in the following analysis. An analysis of these cases shows the following:

TABLE II.—SOLID TUMORS OF THE MESENTERY.

Kinds of Tumor	No. of Cases	Recoveries	Deaths	Mortality (percentage)
Fibromata	9	8	1	11.1
Sarcomata	7	1	6	85.7
Lipomata	2	2	0	0.0
Myxofibromata	2	2	0	0.0
Carcinoma	1	0	1	100.0
Lymphangioma	1	1	0	0.0
Tubercular	1	0	1	100.0
Colesteoma (?)	1	1	0	0.0
Hæmatoma	1	0	1	100.0
Myxoma	1	0	1	100.0
Large Spindle-celled Tumor	1	1	0	0.0
Totals	27	16	11	40.7

A further analysis of these cases shows that out of the twenty-seven operations there were 13 resections of gut, varying in length from 4/5 in. in the shortest to 8 ft. 2 in. in the longest. Of these 13 resections, six died and seven lived, or a mortality of 46.15%. Three of these resections were for sarcoma, all of which died. Five were for fibromata and one only died, which gives a mortality of 20%. The number of males affected is 11, ranging in age from 14 to 70 years, against 16 females ranging in age from 8 to 60 years.

In this series of cases the fibromata are most numerous, with the sarcomata a close second. When we consider that Case 11 of series was most probably a sarcoma (since it formed metastases in liver and sigmoid flexure) we have 8 sarcomata against 9 fibromata. With the carcinoma case we have 9 malignant cases out of 27, or 33⅓% of series.

As to etiology we know nothing, our ignorance being quite as profound as about tumors springing from other sources. Trauma is said to be a cause and we all know how unreliable a history of trauma is, especially when leading questions are asked; still in Case 17 of series the sarcoma was either caused by, or more probably hastened in its course by the patient's falling from his horse and hurting himself badly. Cases are not uncommon in children. Arnstein reported a case at the age of 4 years, and collected nine others in children. The present series shows two in children of 8 and 14 years, while my own case could not have occurred later than 12 years when the patient noticed the growth herself. Most of the cases occurred between the ages of 30 and 45, with the extremes of age from our present knowledge between 4 and 70 years.

All of these tumors seem to have a special tendency to become malignant, sooner or later, even though they may remain benign for years. Most of them become rapidly malignant. This seems especially to be the case in very young patients if growth is rapid. The origin is generally between the folds of the mesentery, or else retroperitoneal; the growth pushing its way between the folds of the mesentery as it enlarges, and at the same time growing backward and becoming attached to the vertebral column. In my own case the origin was probably intermesenteric, with early pedunculation, for the tumor was evidently perfectly free in the abdominal cavity except for its small pedicle.

The diagnosis is never certain and generally it is not known till the abdomen is opened. It will usually be found impossible to differentiate between solid and cystic tumors unless you can get fluctuation, which is rare on account of the consistency of cyst contents. The diagnosis might be made by aspiration, but this is a procedure entirely unwarranted, because of the disturbance the needle produces, and the fact that the presence of a tumor demands operation whether it be cystic or solid. The most common growths with which these tumors may be confounded are ovarian cysts. This confusion can generally be obviated by examining the patient in the Trendelenberg position, when the intestines gravitating toward the diaphragm greatly facilitates diagnosis. The other conditions

with which confusion may be had are tumors of the pancreas and kidney, also extensive hydrops of the gall-bladder, in which condition the distended and freely movable organ may readily be confounded with mesenteric tumor, but its traceable connection with the liver usually makes the distinction clear. Carcinoma of the stomach or intestines and cysts of the spleen are also to be borne in mind. Floating kidney is especially to be remembered, and a diagnosis of this condition would be well-nigh impossible were it not that when a kidney is sufficiently movable to be confounded with a mesenteric tumor it can be caught up and its renal contour readily made out, and the palpating hand can be pressed into the bed-space where the organ should be normally. Cysts of the spleen cannot be differentiated from cystic tumors of the mesentery, and seldom from solid tumors, unless fluctuation can be determined.

In conclusion, the exact diagnosis is not of vital importance, but the *one important thing is to recognize the presence of a tumor early,* which fortunately is easily done. All tumors in the abdominal cavity demand immediate operation no difference what the growth may be, and the mortality will be lowered by a recognition of this fact and the early surgical treatment of the patient. We all, however, like to make an exact diagnosis, and we should never leave anything unturned in our endeavor to arrive at a correct conclusion, provided we do not jeopardize the life of our patient by so doing. We should always bear in mind the best procedure to insure the patient's safety and future health. After all, the best method to arrive at a correct diagnosis is to hold in mind all the conditions that we might have in any given region and confirm or eliminate them one by one till our conclusion is reached.

The only treatment is removal of the tumor just as soon as it is diagnosed.

Report of Case.—In the latter part of September, 1904, Mrs. M., aged 26, married, was referred to me for operation., She gave the following history:

Family history negative. Measles at age of 8, no other sickness, and was a strong, healthy girl. Patient says at the age of 12 she noticed a movable "swelling" a little larger than a walnut

in her abdomen just to the right of the navel. It gave her no pain and she thought nothing of it. A year later she began to menstruate and her mother noticed the tumor which was then a little larger. Menstruation was normally established and continued regular every four weeks, lasting three days. She was married in November, 1897, at 18 years of age. Her husband says that he noticed the tumor at that time and it was about the size of a "big apple." Soon she became pregnant and on October 3, 1898, after a normal pregnancy and labor her first child was born. After weaning the baby menstruation was again normal and regular till her second pregnancy, in 1901. On March 13, 1902, the second healthy baby was born after normal pregnancy and labor. This baby, as the first, was nursed by its mother.

During all this time the tumor had grown slowly, but a little more rapidly since the birth of the first child, so that two years after the birth of the second child the tumor was about the size of a cocoanut, freely movable, giving no pain or other inconvenience save from its weight. The growth was not rapid till three months before I saw the patient. During the two months prior to my seeing the case the growth had been very rapid, attended by gradually increasing pain and discomfort, being so severe as to confine the patient to her bed for the month previous to my seeing her. She came into the hospital on a cot on which she was removed from her home in Southern Kentucky.

Examination showed an anemic, cachectic, much emaciated patient, with a nodular tumor occupying all the abdominal cavity from just below the ensiform cartilage to the pubes. Palpation showed a fixed mass of very irregular morphology, with a large, hard, rounded nodule in the umbilical region, the rest of the nodules and depressions feeling rather soft and spongy, but no fluctuation. Vaginal examination showed the uterus to be fixed and continuous with the rest of the tumor as far as I could tell, but it presented the peculiarity of the whole pelvis being full of tumor without any definite form. Heart and lungs seemed good. No constipation but severe digestive disturbance. No vomiting. Pulse 120, temperature 102½.

No diagnosis could be made, but I thought it was probably a multilocular adeno-cystoma of ovary with twisted pedicle, with subsequent inflammatory exudate and consequent adhesions.

The condition of the patient was so bad that I did not deem it advisable to attempt operation at once, thinking that probably the condition was largely due to her long, exhausting train trip, and that a few days' rest would improve her condition. During the next two days she improved very slightly. I then left the city and was gone for five days. I returned October 1st only to find the patient *in extremis*. The tumor appreciably enlarged during absence. Temperature 103, pulse 130, with absolute suppression of the urine, which had existed for the past 66 hours. She had been catheterized repeatedly and not a drop of urine. The patient was put in hot packs, given diureties, etc., without avail. There were absolutely no symptoms of uremia, so I decided to open the abdomen.

The abdomen was opened 72 hours after the complete suppression had occurred, or about six hours after I returned to the city. As soon as the peritoneum, which was injected and inflamed, was opened, brown mucoid, sanguineous fluid began to pour out. A large, round, solid tumor, appeared at the upper angle of the incision, and from this solid tumor above, conforming to the contour of the abdomen, extending into the pelvis and involving the peritoneum, was the rest of the tumor, which was soft, mushy and slimy to feel; bled at every touch, and exceedingly friable without capsule or other covering, and of a raw, dark red color. This friable portion of the tumor was attached to the solid tumor on either side and below, but not above. The solid tumor was easily separated from the soft portion and its pedicle easily tied off and the tumor cut away. The new growth was then thoroughly explored and found to involve everything; entering the peritoneum at all places just as if it were no barrier to its progress. The parietal, intestinal, uterine and tubal peritoneum were all encased in the growth, which filled the entire lower cavity. This new growth was torn away in handfuls to the extent of a wash basin full. The growth resembled a partially organized blood-clot mixed with slimy mucus, more than anything I can think of. Not more than half of this new growth was removed, because the hemorrhage was so profuse and the futility of getting it all away so apparent. What was removed was done so chiefly out of curiosity and hoping to relieve the pressure from over the ureters to see the

effect on the kidneys, believing from the symptoms that I had a pressure anuria to deal with. The cavity was then packed with gauze to control hemorrhage and the ends of the compression packs brought out of the lower angle of the wound, and the abdomen closed. The patient was almost dead from hemorrhage and shock at the stopping of the operation.

Saline was given under the breasts all during the operation and after the patient was put to bed she rallied under strong stimulants and lived for five days.

One of the most interesting features of the case is the fact that in the first twenty-four hours after operation she secreted 12 ounces of urine, 23 ounces the next, and 25 the following day. It was not measured after that, but there was no further suppression till death.

The patient was so much better on the second day that I hoped for sufficient recovery for her to get about again. My hopes were dispelled on the third day by finding my dressings still saturated with the same bloody, slimy fluid that ran from the abdomen on the day of operation. This flow continued without any abatement at all till the patient died of exhaustion five days after operation.

Post-mortem was refused. The solid tumor was round, fifteen cm. in diameter, and weighed 3.7 kg. (about 8¼ lbs.). It had a peritoneal covering except about one-third of the lower side, which was deperitonized by the new growth. The pedicle, which was about two inches wide and one inch thick, was almost identical in structure with the new growth and was apparently the channel of the new growth reaching the cavity.

On splitting the solid tumor open it was found to be fibroid with necrotic degeneration in its center, surrounded by a glistening, grayish white tissue zone which extended into the pedicle and replaced the fibrous tissue of the lower part of the tumor and that part which lay towards the symphysis. Microscopic sections showed the tumor in the non-degenerated portion to be fibroid with small pale nuclei showing poor nutrition. The degenerated new growth, on the other hand, showed masses of vigorous round cells having large clear nuclei with numerous mitotic figures, indicative of rapid growth and characteristic of round-celled sarcoma. The new growth seemed to have sprung

from the pedicle and presented the same microscopic picture as the sarcomatous portion of the original tumor; the cells however, had a decidedly more embryonic look than the former.

This tumor was the most malignant growth I ever saw and the sarcomatous degeneration must have occurred during the last few months, and before that time was a benign growth that could have been easily removed and the patient's life saved.

The lesson is the old story, but forcibly retold. Had the patient not carried this tumor for years, but submitted to operation sooner, both the pathology and termination of this case would have been changed.

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The above are among the more important articles. No attempt at a complete bibliography has been made. References to cases reported are given in Table I.